



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

Dirk Kempthorne, Governor
Toni Hardesty, Director

May 18, 2006

Certified Mail No. 7005 1160 0000 1550 3369

Dave Neal
Ada County Solid Waste Management
Ada County Landfill
200 West Front Street
Boise, Idaho 83702

RE: Facility ID No. 001-00195, Ada County Landfill, Ada County
Final Permit Letter

Dear Mr. Neal:

The Idaho Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-050056 to Ada County for the Ada County Landfill, in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho).

This permit is based on your permit application received December 20, 2005. This permit is effective immediately and it replaces PTC No. P-040004, issued June 15, 2004, the terms and conditions of which shall no longer apply. This permit does not release Ada County from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

A representative of the Boise Regional Office will contact you regarding a meeting with DEQ to discuss the permit terms and requirements. DEQ recommends the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to call Bill Rogers at (208) 373-0502 to address any questions or concerns you may have with the enclosed permit.

Sincerely,

Martin Bauer, Administrator
Air Quality Division

MB/SYC/bf

Permit No. P-050056

Enclosures



**Air Quality
PERMIT TO CONSTRUCT**

**State of Idaho
Department of Environmental Quality**

PERMIT No.: P-050056

FACILITY ID No.: 001-00195

AQCR: 64

CLASS: SM

SIC: 4953

ZONE: 11

UTM COORDINATE (km): 557.5, 4838.6

1. PERMITTEE

Ada County – Ada County Landfill

2. PROJECT

Permit to Construct Modification – Addition of North Ravine Cell

3. MAILING ADDRESS

200 West Front Street

CITY

Boise

STATE

ID

ZIP

83702

4. FACILITY CONTACT

Dave Neal

TITLE

Director, Ada County Solid Waste
Management

TELEPHONE

(208) 577-4730

5. RESPONSIBLE OFFICIAL

Dave Neal

TITLE

Director, Ada County Solid Waste
Management

TELEPHONE

(208) 577-4730

6. EXACT PLANT LOCATION

100300 Seamans Gulch Road, Boise, Idaho

COUNTY

Ada

7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

Sanitary Landfill, Wood Materials Recycling, and Hazardous Materials Facility

8. GENERAL CONDITIONS

This permit is issued according to IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, and pertains only to emissions of air contaminants regulated by the State of Idaho and to the sources specifically allowed to be constructed by this permit.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment.

This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes of design or equipment may require DEQ approval pursuant to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.200, et seq.


TONI HARDESTY, DIRECTOR
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED

May 18, 2006

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Acronyms, Units, And Chemical Nomenclature

ACLF	Ada County landfill
Act	Clean Air Act
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
Btu/hr	British thermal unit per hour
cfm	cubic feet per minute
CFR	Code of Federal Regulations
DEQ	Department of Environmental Quality
°F	degrees Fahrenheit
HAPs	hazardous air pollutants
HHLF	Hidden Hollow Landfill
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
LFG	landfill gas
NMOC	nonmethane organic compounds
MSW	municipal solid waste
NO_x	nitrogen oxides
NRC	North Ravine Cell
O&M	operation and maintenance
PM₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
ppm	parts per million
PTC	permit to construct
scfm	standard cubic feet per minute
SIC	Standard Industrial Classification
SO₂	sulfur dioxide
TAPs	Toxic air pollutants
T/yr	tons per year
TAPs	toxic air pollutants
UTM	Universal Transverse Mercator

AIR QUALITY PERMIT TO CONSTRUCT NO. P-050056

Permittee:	Ada County-Ada County Landfill	Facility ID No. 001-00195	Date Issued:	May 18, 2006
Location:	Boise, Ada County, Idaho			

1. PERMIT TO CONSTRUCT SCOPE

Purpose

- 1.1 This permit modification allows Ada County Solid Waste Management to expand the Ada County Landfill (ACLF) to include the new North Ravine Cell (NRC). When completed, the ACLF will include the existing Hidden Hollow Landfill (HHLF) cell and the NRC. In addition, this modification requires that additional control devices be installed to oxidize landfill gas when the landfill gas volume approaches the design capacity of the existing control equipment. This modification also includes the following applicable state and federal requirements:

- IDAPA 58.01.01.859 *"Standards Of Performance For Municipal Solid Waste Landfills That Commenced Construction, Reconstruction Or Modification On Or After May 30, 1991"*,
- 40 CFR 60 Subpart WWW *"Standards of Performance for Municipal Solid Waste Landfills"*, and
- 40 CFR 63 Subpart AAAA *"National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills."*

- 1.2 This PTC replaces PTC No. P-040004, issued June 15, 2004, the terms and conditions of which shall no longer apply.

Regulated Sources

- 1.3 Table 1.1 lists all sources of emissions that are regulated in this PTC.

Table 1.1 REGULATED EMISSIONS SOURCES

Permit Sections	Source Description	Emissions Control(s)
2	Hidden Hollow Landfill (HHLF) cell and North Ravine Cell (NRC) at ACLF	Two enclosed flares. Each has a maximum capacity of 2,000 scfm of landfill gas (LFG)
2	HHLF cell and NRC at ACLF	Additional flares when landfill gas volume triggers installation requirement
3	Wood chipper, power screen, and two diesel-fired generators	None

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2. HIDDEN HOLLOW LANDFILL (HHLF) CELL AND NORTH RAVINE CELL (NRC)

2.1 Process Description

ACLF consists of the existing active HHLF cell and the yet to be constructed NRC, which is planned to accept municipal solid waste (MSW) in 2007. The HHLF cell encompasses an area of approximately 110 acres with design capacity of 16 million cubic yards and is anticipated to be closed in 2020. The NRC was designed to have a final capacity of 70 million cubic yards and an active life of 90 years based on the anticipated growth patterns. The NRC encompasses an area of approximately 260 acres.

ACLF generates odorous landfill gas (LFG). LFG is a byproduct produced from decomposition of organic material in the MSW landfill. LFG is typically a mixture of approximately 50% methane and 50% carbon dioxide, and a minor amount of nonmethane organic compounds (NMOC). Within the NMOC are some hazardous air pollutants (HAPs) and toxic air pollutants (TAPs). A trace amount of hydrogen sulfide gas is also found in the LFG. Landfills may continue to generate LFG for 10 to 20 years, or longer, after waste disposal has ceased.

2.2 Emissions Control Description

The LFG collection system and control system are required to control the LFG from ACLF in accordance with 40 CFR 60, Subpart WWW. The timeframe to install and operate the LFG collection system and control system to control the LFG produced at ACLF is specified in 40 CFR 60, Subpart WWW, which is included in this permit.

The **existing** ACLF gas collection system and control system (two identical enclosed flares system) began operating in May 2004 as a voluntary control measure. The existing LFG collection system provides gas collection for the phase I closure of the HHLF cell that is 46 acres of the 110-acre HHLF cell surface. The existing control system is designed to accommodate potential HHLF cell LFG flows with the total design capacity of 4,000 scfm. Based on LANDGEM modeling data using the anticipated growth patterns, the existing control system has the capacity to control LFG flows of HHLF and NRC cells until 2038 per the currently available data.

Additional flare(s) will need to be installed onsite before the design capacity of the existing control system is exceeded. Additional flare(s) may also be added as a backup system to comply with Start up, Shut down and Malfunctions (SSM) plan according to the provisions in 40 CFR 63.6(e)(3). The future gas flare site is included in Figure 1 of the application. G2 Energy (Facility ID 001-00214) has been permitted to produce electrical energy using LFG from ACLF. G2 Energy is a private company. It is independent from ACLF operations.

The Existing Control System – two identical enclosed LFG Flares

The existing LFG control system consists of the following components:

- Condensate system (condensate traps, pump, and controls)
- Two variable speed exhausters (blowers)
- Two enclosed, smokeless flare units
- Two propane tank ignition systems

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The extracted LFG is drawn to the flare system by two exhausters (vacuum blowers). Condensate is captured ahead of the exhausters and stored in small storage vessels (knockout drums). The condensate is automatically separated and pumped into the flare stacks at a controlled rate. The condensate is expected to consist primarily of water vapor generated at a rate of approximately 0.004 gallon per cubic foot of LFG. The exhausters blow the LFG into the flares. Two enclosed flares, each capable of handling between 200 scfm and 2,000 scfm of LFG, will be operated in parallel. Propane-fired pilots will provide for continuous auto-ignition of the LFG. Sensors (thermocouples) in the flare stacks will continuously monitor flare operations. In the event the flame goes out, the integrated control system will shutdown the flares. The flares are enclosed. The flare flame can not be seen. However, system operators are able to monitor the presence of the flame through sight glasses of the enclosure.

The physical and operation specifications for each flare, based on an initial manufacturer's submittal, are listed as follows:

Manufacturer/Model:	John Zink enclosed ZTOF flare system
Height:	40 feet
Diameter:	12.0 feet
Exhaust flowrates:	200 to 2,000 scfm
Operating temperature:	1,400 to 1,800 °F
Heat Release:	Maximum 65,520,000 Btu/hr

The NMOC and methane are combusted by the enclosed flares at temperature between 1,400 – 1,800°F. According to the manufacturer, the flares at this temperature will achieve a NMOC destruction efficiency of 98%, with a residence time of 0.7 seconds.

Emissions Limits

2.3 Visible Emissions Limit

The permittee shall not discharge any air pollutant into the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

2.4 Particulate Matter Emissions Limits for Incinerators

Particulate matter emissions from each of the flares shall not exceed 0.2 pounds per 100 pounds of landfill gas combusted, in accordance with IDAPA 58.01.01.786.

2.5 Odors from the Flares

The permittee shall not allow, suffer, cause, or permit the emissions of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution, in accordance with IDAPA 58.01.01.775-776.

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2.6 Excess Emissions

The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

2.7 Open Burning

The permittee shall comply with provisions of IDAPA 58.01.01.600-616, *Rules for Control of Open Burning*.

2.8 Air Pollution Emergency Rule

The permittee shall comply with IDAPA 58.01.01.550-562, *Air Pollution Emergency Rule*.

Operating Requirements

2.9 Operations and Maintenance Manual

Within 60 days after startup of landfill gas flares, the permittee shall have developed an O&M manual for the landfill gas flares, which describes the procedures that will be followed to comply with General Provision 2 and the manufacturer specifications for the flares. This manual shall remain on site at all times and shall be made available to DEQ representatives upon request. Within 30 days of O&M manual development the permittee shall submit a copy of the manual to DEQ.

2.10 LFG Control System

- 2.10.1 The permittee shall route LFG to the second enclosed flare when, or before the first enclosed flare reaches its design capacity of 2,000 scfm of LFG.
- 2.10.2 The permittee shall install additional flare(s) before the total flow rate of LFG from the HHLF cell and NRC reaches the design capacity of the existing control system.

Monitoring and Recordkeeping Requirements

2.11 Opacity Monitoring

The permittee shall conduct a quarterly inspection of visible emissions from each of the flares during daylight hours and under normal operating conditions. The inspection shall consist of a see/no see evaluation for each flare of visible emissions. If any visible emissions are present from any flare, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in accordance with IDAPA 58.01.01.130-136.

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The permittee shall maintain records of the results of each visible emissions inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken. The visible emissions inspection is not required when any of the flares is not in operation. Records of this information shall be kept on site for the most recent two year period and shall be made available to DEQ representatives upon request.

2.12 Odors Complaints

The permittee shall maintain records of all odor complaints received. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as applicable. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken. Records of this information shall be kept on site for the most recent two year period and shall be made available to DEQ representatives upon request.

Performance Tests of LFG Control System**2.13 Performance Test of LFG Control System**

2.13.1 The permittee shall conduct a performance test in accordance with IDAPA 58.01.01.157 and 40 CFR 60 Subpart WWW.

- Prior to conducting any performance test, the permittee is strongly encouraged to submit to DEQ in writing, at least 30 days in advance, the following for approval:
 - i. The type of method to be used;
 - ii. Any extenuating or unusual circumstances regarding the proposed test; and
 - iii. The proposed schedule for conducting and reporting the test.
- The permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test, or shorter time period as provided in a permit, order, consent decree or by DEQ approval. DEQ may, at its option, have an observer present at any emissions tests conducted on a source.

2.13.2 The permittee shall record the operating ranges of the control system parameters specified in 40 CFR 60.756 when conducting any performance testing.

2.13.3 If the performance test is conducted to satisfy a performance test requirement imposed by state or federal regulation, rule, permit, order, or consent decree, a written report shall be submitted to DEQ within 30 days of the completion of the test. The written report shall:

- Meet the format and content requirements specified by the DEQ in any applicable rule, regulation, guidance, permit, order, or consent decree. Any deviations from the format and contents specified require prior written approval from the DEQ. Failure to obtain such approval may result in the rejection of the test results.
- Include all data required to be noted or recorded in any referenced test method, and

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- The permittee shall submit an initial performance test report for each control device in accordance with 40 CFR 60.757.

2.13.4 When to conduct the initial performance test for each control system.

- The permittee shall conduct an initial performance test on the flare(s) already started up not later than 180 days after the issuance of this permit or at such other times as may be required by DEQ.
- For the flare which was described as a back up flare in PTC issued June 15, 2004, if it hasn't started up, the permittee shall conduct initial performance test not later than 180 days after initial startup of the flare covered by this permit or at such other times as may be required by DEQ.
- For the additional control system required under Permit Condition 2.10.2, the permittee shall conduct initial performance test not later than 180 days after initial startup of the additional control system or at such other times as may be required by DEQ.

Reporting Requirements

- 2.14** The permittee shall submit an annual NMOC report until nonmethane emissions are less than 50 megagrams per year in accordance with IDAPA 58.01.01.859.05.a.ii. The report shall be submitted to DEQ by September 30 each year.

Permitting Requirements

- 2.15** In accordance with IDAPA 58.01.01.859.04.b, the permittee shall submit a complete Tier I operating permit application within one year of commencing construction of the NRC.
- 2.16** The permittee shall submit a complete PTC modification application for the additional control system within six months after the first time that the LFG from ACLF reaches 90% of the total design capacity of the exiting control system (i.e. 4,000 scfm), or whenever the design for the additional control system is complete. The application shall address how the LFG from ACLF will be controlled if/when the LFG reaches the design capacity of the existing control system (i.e. 4,000 scfm of LFG).

40 CFR 60 Subpart WWW Requirements

2.17 General Requirement

The permittee shall be in compliance with 40 CFR 60, Subpart WWW in accordance with IDAPA 58.01.01.859.03. The following permit conditions apply to ADLF based on the information in the application. Should, in the future, changes made to ACLF trigger other requirements in 40 CFR 60, Subpart WWW, requirements in 40 CFR 60, Subpart WWW shall govern.

The permittee shall be in compliance with the General Provisions of 40 CFR 60 when they are applicable.

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2.18 Standards for Air Emissions from Municipal Solid Waste Landfills (40 CFR 60.752)

2.18.1 The owner or operator of ACLF is subject to part 70 or Title V permitting requirements.
[40 CFR 60.752(b)]

2.18.2 The owner or operator of ACLF shall comply with 40 CFR 60.752(b)(2).

The owner or operator shall:

[40 CFR 60.752(b)(2)]

Submit a collection and control system design plan prepared by a professional engineer to DEQ within one year of when the calculated NMOC emission rate is equal to or greater than 50 megagrams.
[40 CFR 60.752(b)(2)(I)]

The collection and control system as described in the plan shall meet the design requirements of 40 CFR 60.752(b)(2)(ii).
[40 CFR 60.752(b)(2)(I)(A)]

The collection and control system design plan shall conform with specifications for active collection systems in 40 CFR 60.759.
[40 CFR 60.752(b)(2)(I)(C)]

Install a collection and control system that captures the gas generated within the landfill as required by 40 CFR 60.752 (b)(2)(ii)(A) and 40 CFR 60.752 (b)(2)(iii) within 30 months after the first annual report in which the emission rate equals or exceeds 50 megagrams per year, or by April 28, 2007.
[40 CFR 60.752(b)(2)(II)]

An active collection system shall:

[40 CFR 60.752(b)(2)(II)(A)]

Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;
[40 CFR 60.752(b)(2)(II)(A)(1)]

Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of:
[40 CFR 60.752(b)(2)(II)(A)(2)]

5 years or more if active; or
[40 CFR 60.752(b)(2)(II)(A)(2)(i)]

2 years or more if closed or at final grade.
[40 CFR 60.752(b)(2)(II)(A)(2)(ii)]

Collect gas at a sufficient extraction rate;
[40 CFR 60.752(b)(2)(II)(A)(3)]

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Be designed to minimize off-site migration of subsurface gas.

[40 CFR 60.752(b)(2)(ii)(A)(4)]

Route all the collected gas to a control system that complies with the requirements of 40 CFR 60.752(b)(2)(iii)(B).

[40 CFR 60.752(b)(2)(iii)]

A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 ppm by volume, dry basis as hexane at 3% oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in 40 CFR 60.754(d).

[40 CFR 60.752(b)(2)(iii)(B)]

The control device shall be operated within the parameter ranges established during the initial or most recent performance test as required in Permit Condition 2.13. The operating parameters to be monitored are specified in 40 CFR 60.756;

[40 CFR 60.752(b)(2)(iii)(B)(2)]

Operate the collection and control device installed to comply with this subpart in accordance with the provisions of 40 CFR 60.753, 60.755 and 60.756.

[40 CFR 60.752(b)(2)(iv)]

The collection and control system may be capped or removed provided that all the conditions of 40 CFR 60.752(b)(2)(v) (A), (B), and (C) are met:

[40 CFR 60.752(b)(2)(v)]

The landfill shall be a closed landfill as defined in 40 CFR 60.751. A closure report shall be submitted to DEQ as provided in 40 CFR 60.757(d);

[40 CFR 60.752(b)(2)(v)(A)]

The collection and control system shall have been in operation a minimum of 15 years; and

[40 CFR 60.752(b)(2)(v)(B)]

Following the procedures specified in 40 CFR 60.754(b), the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

[40 CFR 60.752(b)(2)(v)(C)]

- 2.18.3 When a MSW landfill subject to this subpart is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit under 40 CFR 70 for the landfill if the landfill is not otherwise subject to the requirements of 40 CFR 70 and if the owner or operator meets the conditions for control system removal specified in 40 CFR 60.752 (b)(2)(v).

[40 CFR 60.752(d)]

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2.19 Operational Standards for Collection and Control Systems (40 CFR 60.753)

Each owner or operator of an MSW landfill with a gas collection and control system used to comply with the provisions of 40 CFR 60.752(b)(2)(ii) shall:

- 2.19.1 Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:

[40 CFR 60.753(a)]

5 years or more if active; or

[40 CFR 60.753(a)(1)]

2 years or more if closed or at final grade.

[40 CFR 60.753(a)(2)]

- 2.19.2 Operate the collection system with negative pressure at each wellhead except under the following conditions:

[40 CFR 60.753(b)]

A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 40 CFR 60.757(f)(1);

[40 CFR 60.753(b)(1)]

Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan;

[40 CFR 60.753(b)(2)]

A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by DEQ.

[40 CFR 60.753(b)(3)]

- 2.19.3 Operate each interior wellhead in the collection system with a landfill gas temperature less than 55°C and with either a nitrogen level less than 20% or an oxygen level less than 5%. The owner or operator may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

[40 CFR 60.753(c)]

The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by 40 CFR 60.752(b)(2)(i).

[40 CFR 60.753(c)(1)]

Unless an alternative test method is established as allowed by 40 CFR 60.752(b)(2)(i), the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that:

[40 CFR 60.753(c)(2)]

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The span shall be set so that the regulatory limit is between 20 and 50% of the span;

[40 CFR 60.753(c)(2)(i)]

A data recorder is not required;

[40 CFR 60.753(c)(2)(ii)]

Only two calibration gases are required, a zero and span, and ambient air may be used as the span;

[40 CFR 60.753(c)(2)(iii)]

A calibration error check is not required;

[40 CFR 60.753(c)(2)(iv)]

The allowable sample bias, zero drift, and calibration drift are $\pm 10\%$.

[40 CFR 60.753(c)(2)(v)]

2.19.4 Operate the collection system so that the methane concentration is less than 500 ppm above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

[40 CFR 60.753(d)]

2.19.5 Operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within one hour; and

[40 CFR 60.753(e)]

2.19.6 Operate the control or treatment system at all times when the collected gas is routed to the system.

[40 CFR 60.753(f)]

2.19.7 If monitoring demonstrates that the operational requirements in 40 CFR 60.753(b), (c), or (d) are not met, corrective action shall be taken as specified in 40 CFR 60.755(a)(3) through (5) or 40 CFR 60.755(c). If corrective actions are taken as specified in 40 CFR 60.755, the monitored exceedance is not a violation of the operational requirements in this section.

[40 CFR 60.753(g)]

2.20 Testing Methods and Procedures (40 CFR 60.754)

2.20.1 The landfill owner or operator shall calculate the NMOC emission rate using either the equation provided in 40 CFR 60.754(a)(1)(i) or the equation provided in 40 CFR 60.754 (a)(1)(ii). Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in 40 CFR 60.754 (a)(1)(i), for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in 40 CFR 60.754 (a)(1)(ii), for part of the life of the landfill. The values to be

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used in both equations are 0.05 per year for k, 170 cubic meters per megagram for L_0 , and 4,000 ppm by volume as hexane for the C_{NMOC} . For landfills located in geographical areas with a thirty year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorologic site, the k value to be used is 0.02 per year. ACLF is located in geographical areas with a 30 year annual average precipitation of less than 25 inches.

[40 CFR 60.754(a)(1)]

The following equation shall be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^n 2 k L_0 M_i (e^{-kt_i}) (C_{NMOC}) (3.6 \times 10^{-9})$$

Where,

M_{NMOC} =Total NMOC emission rate from the landfill, megagrams per year

k=methane generation rate constant, year⁻¹

L_0 =methane generation potential, cubic meters per megagram solid waste

M_i =mass of solid waste in the ith section, megagrams

t_i =age of the ith section, years

C_{NMOC} =concentration of NMOC, parts per million by volume as hexane

3.6×10^{-9} =conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if documentation of the nature and amount of such wastes is maintained.

[40 CFR 60.754(a)(1)(i)]

The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown.

$$M_{NMOC} = 2L_0 R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$$

Where:

M_{NMOC} =mass emission rate of NMOC, megagrams per year

L_0 =methane generation potential, cubic meters per megagram solid waste

R=average annual acceptance rate, megagrams per year

k=methane generation rate constant, year⁻¹

t = age of landfill, years

C_{NMOC} =concentration of NMOC, parts per million by volume as hexane

c=time since closure, years; for active landfill c=0 and $e^{-kc}=1$

3.6×10^{-9} =conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value of R, if documentation of the nature and amount of such wastes is maintained.

[40 CFR 60.754(a)(1)(ii)]

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- 2.20.2 After the installation of a collection and control system in compliance with 40 CFR 60.755, the owner or operator shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in 40 CFR 60.752(b)(2)(v), using the following equation:

$$M_{\text{NMOC}} = 1.89 \times 10^{-3} Q_{\text{LFG}} C_{\text{NMOC}}$$

Where,

M_{NMOC} = mass emission rate of NMOC, megagrams per year

Q_{LFG} = flow rate of landfill gas, cubic meters per minute

C_{NMOC} = NMOC concentration, parts per million by volume as hexane

[40 CFR 60.754(b)]

The flow rate of landfill gas, Q_{LFG} , shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of Section 4 of Method 2E of Appendix A of 40 CFR 60.

[40 CFR 60.754(b)(1)]

The average NMOC concentration, C_{NMOC} , shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of Appendix A of 40 CFR 60. If using Method 18 of appendix A of 40 CFR 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from Method 25C of appendix A of 40 CFR 60 by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.

[40 CFR 60.754(b)(2)]

The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by DEQ.

[40 CFR 60.754(b)(3)]

- 2.20.3 For the performance test required in 40 CFR 60.752(b)(2)(iii)(B), Method 25, 25C, or Method 18 of Appendix A of 40 CFR 60 must be used to determine compliance with the 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by DEQ as provided by 40 CFR 60.752(b)(2)(i)(B). Method 3 or 3A shall be used to determine oxygen for correcting the NMOC concentration as hexane to three percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as hexane), Method 25A should be used in place of Method 25. If using Method 18 of Appendix A of 40 CFR 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:

$$\text{Control Efficiency} = (\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}}) / (\text{NMOC}_{\text{in}})$$

Where,

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$NMOC_{in}$ = mass of NMOC entering control device

$NMOC_{out}$ = mass of NMOC exiting control device

[40 CFR 60.754(d)]

2.21 Compliance Provisions (40 CFR 60.755)

- 2.21.1 The following specified methods in 40 CFR 60.755(a)(1) through 40 CFR 60.755(a)(6) shall be used to determine whether the gas collection system is in compliance with 40 CFR 60.752(b)(2)(ii).

[40 CFR 60.755(a)]

For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with 40 CFR 60.752(b)(2)(ii)(A)(1), one of the following equations shall be used. The k and L_0 kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by DEQ. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

[40 CFR 60.755(a)(1)]

For sites with unknown year-to-year solid waste acceptance rate:

$$Q_m = 2L_0 R (e^{-kc} - e^{-kt})$$

Where,

Q_m = maximum expected gas generation flow rate, cubic meters per year

L_0 = methane generation potential, cubic meters per megagram solid waste

R = average annual acceptance rate, megagrams per year

k = methane generation rate constant, year⁻¹

t = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years

c = time since closure, years (for an active landfill $c = 0$ and $e^{-kc} = 1$)

[40 CFR 60.755(a)(1)(i)]

For sites with known year-to-year solid waste acceptance rate:

$$Q_M = \sum_{i=1}^n 2 k L_0 M_i (e^{-k_i t_i})$$

Where,

Q_M = maximum expected gas generation flow rate, cubic meters per year

k = methane generation rate constant, year⁻¹

L_0 = methane generation potential, cubic meters per megagram solid waste

M_i = mass of solid waste in the i^{th} section, megagrams

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t_i = age of the i^{th} section, years

[40 CFR 60.755(a)(1)(II)]

If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in 40 CFR 60.755(a)(1)(i) and (ii). If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in 40 CFR 60.755(a)(1)(i) or (ii) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.

[40 CFR 60.755(a)(1)(III)]

For the purposes of determining sufficient density of gas collectors for compliance with 40 CFR 60.752(b)(2)(ii)(A)(2), the owner or operator shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to DEQ, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

[40 CFR 60.755(a)(2)]

For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 40 CFR 60.752(b)(2)(ii)(A)(3), the owner or operator shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within five calendar days, except for the three conditions allowed under 40 CFR 60.753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to DEQ for approval.

[40 CFR 60.755(a)(3)]

Owners or operators are not required to expand the system as required in 40 CFR 60.755(a)(3) during the first 180 days after gas collection system startup.

[40 CFR 60.755(a)(4)]

For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in 40 CFR 60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within five calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to DEQ for approval.

[40 CFR 60.755(a)(5)]

An owner or operator seeking to demonstrate compliance with 40 CFR 60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in 40 CFR 60.759 shall provide information satisfactory to DEQ as specified in 40 CFR 60.752(b)(2)(i)(C) demonstrating that off-site migration is being controlled.

[40 CFR 60.755(a)(6)]

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- 2.21.2 For purposes of compliance with 40 CFR 60.753(a), each owner or operator of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in 40 CFR 60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:

[40 CFR 60.755(b)]

5 years or more if active; or

[40 CFR 60.755(b)(1)]

2 years or more if closed or at final grade.

[40 CFR 60.755(b)(2)]

- 2.21.3 The following procedures shall be used for compliance with the surface methane operational standard as provided in 40 CFR 60.753(d).

[40 CFR 60.755(c)]

After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR 60.755 (d).

[40 CFR 60.755(c)(1)]

The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.

[40 CFR 60.755(c)(2)]

Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of Appendix A of 40 CFR 60, except that the probe inlet shall be placed within five to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

[40 CFR 60.755(c)(3)]

Any reading of 500 ppm or more above background at any location shall be recorded as a monitored exceedance and the actions specified in the following 40 CFR 60.755(c)(4)(i) through (v) shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR 60.753(d).

[40 CFR 60.755(c)(4)]

The location of each monitored exceedance shall be marked and the location recorded.

[40 CFR 60.755(c)(4)(i)]

Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.

[40 CFR 60.755(c)(4)(ii)]

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If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in 40 CFR 60.755(c)(4)(v) shall be taken, and no further monitoring of that location is required until the action specified in 40 CFR 60.755(c)(4)(v) has been taken.

[40 CFR 60.755(c)(4)(III)]

Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in 40 CFR 60.755(c)(4)(ii) or (iii) shall be re-monitored one month from the initial exceedance. If the one-month remonitoring shows a concentration less than 500 ppm above background, no further monitoring of that location is required until the next quarterly monitoring period. If the one-month remonitoring shows an exceedance, the actions specified in 40 CFR 60.755(c)(4) (iii) or (v) shall be taken.

[40 CFR 60.755(c)(4)(iv)]

For any location where monitored methane concentration equals or exceeds 500 ppm above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to DEQ for approval.

[40 CFR 60.755(c)(4)(v)]

The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

[40 CFR 60.755(c)(5)]

- 2.21.4 Each owner or operator seeking to comply with the provisions in 40 CFR 60.755 (c) shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

[40 CFR 60.755(d)]

The portable analyzer shall meet the instrument specifications provided in Section 3 of Method 21 of Appendix A of 40 CFR 60, except that “methane” shall replace all references to VOC.

[40 CFR 60.755(d)(1)]

The calibration gas shall be methane, diluted to a nominal concentration of 500 ppm in air.

[40 CFR 60.755(d)(2)]

To meet the performance evaluation requirements in section 3.1.3 of Method 21 of Appendix A of 40 CFR 60, the instrument evaluation procedures of section 4.4 of Method 21 of Appendix A of 40 CFR 60 shall be used.

[40 CFR 60.755(d)(3)]

The calibration procedures provided in Section 4.2 of Method 21 of Appendix A of 40 CFR 60 shall be followed immediately before commencing a surface monitoring survey.

[40 CFR 60.755(d)(4)]

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- 2.21.5 The provisions apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed five days for collection systems and shall not exceed one hour for treatment or control devices.

[40 CFR 60.755(e)]

2.22 Monitoring of Operations (40 CFR 60.756)

- 2.22.1 Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:

[40 CFR 60.756(a)]

Measure the gauge pressure in the gas collection header on a monthly basis as provided in 40 CFR 60.755(a)(3); and

[40 CFR 60.756(a)(1)]

Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5); and

[40 CFR 60.756(a)(2)]

Monitor temperature of the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5).

[40 CFR 60.756(a)(3)]

- 2.22.2 Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.

[40 CFR 60.756(b)]

A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ± 1 percent of the temperature being measured expressed in degrees Celsius or ± 0.5 degrees Celsius, whichever is greater.

[40 CFR 60.756(b)(1)]

A device that records flow to or bypass of the control device. The owner or operator shall either:

[40 CFR 60.756(b)(2)]

Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes.

[40 CFR 60.756(b)(2)(i)]

- 2.22.3 Each owner or operator seeking to demonstrate compliance with 40 CFR 60.752(b)(2)(iii) using a device other than an open flare or an enclosed combustor shall provide information satisfactory to DEQ as provided in 40 CFR 60.752(b)(2)(i)(B) describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. DEQ shall review the information and either approve it, or request that additional information be submitted. DEQ may specify additional appropriate monitoring procedures.

[40 CFR 60.756(d)]

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- 2.22.4 Each owner or operator seeking to demonstrate compliance with 40 CFR 60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in 40 CFR 60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

[40 CFR 60.756(f)]

2.23 Reporting Requirements (40 CFR 60.757)

- 2.23.1 Each owner or operator subject to the requirements shall submit an initial design capacity report to DEQ.

[40 CFR 60.757(a)]

The initial design capacity report shall fulfill the requirements of the notification of the date construction is commenced as required by 40 CFR 60.7(a)(1) and shall be submitted no later than:

[40 CFR 60.757(a)(1)]

Ninety days after the date of commenced construction, modification, or reconstruction for landfills that commences construction, modification, or reconstruction on or after March 12, 1996. ACLF modification date is when NRC commenced construction in February 2006.

[40 CFR 60.757(a)(1)(ii)]

The initial design capacity report shall contain the following information:

[40 CFR 60.757(a)(2)]

A map or plot of the landfill, providing the size and location of the landfill, and identifying all areas where solid waste may be landfilled according to the permit issued by the State, local, or tribal agency responsible for regulating the landfill.

[40 CFR 60.757(a)(2)(i)]

The maximum design capacity of the landfill. Where the maximum design capacity is specified in the permit issued by the State, local, or tribal agency responsible for regulating the landfill, a copy of the permit specifying the maximum design capacity may be submitted as part of the report. If the maximum design capacity of the landfill is not specified in the permit, the maximum design capacity shall be calculated using good engineering practices. The calculations shall be provided, along with the relevant parameters as part of the report. DEQ may request other reasonable information as may be necessary to verify the maximum design capacity of the landfill.

[40 CFR 60.757(a)(2)(ii)]

An amended design capacity report shall be submitted to DEQ providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to or above 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density as documented in the annual recalculation required in 40 CFR 60.758(f).

[40 CFR 60.757(a)(3)]

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- 2.23.2 Each owner or operator subject to the requirements shall submit an NMOC emission rate report to DEQ initially and annually thereafter, except as provided for in 40 CFR 60.757(b)(3). DEQ may request such additional information as may be necessary to verify the reported NMOC emission rate.
[40 CFR 60.757(b)]

The NMOC emission rate report shall contain an annual or five-year estimate of the NMOC emission rate calculated using the formula and procedures provided in 40 CFR 60.754(a) or (b), as applicable.
[40 CFR 60.757(b)(1)]

The initial NMOC emission rate report may be combined with the initial design capacity report required in 40 CFR 60.757(a) and shall be submitted no later than indicated in 40 CFR 60.757(b)(1)(i)(A) and (B). Subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided for in 40 CFR 60.757(b)(3).
[40 CFR 60.757(b)(1)(i)]

Ninety days after the date of commenced construction, modification, or reconstruction for landfills that commences construction, modification, or reconstruction on or after March 12, 1996. ACLF modification date is when NRC commenced construction in February 2006.
[40 CFR 60.757(b)(1)(i)(B)]

The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or five-year emissions.
[40 CFR 60.757(b)(2)]

Each owner or operator subject to the requirements is exempted from the requirements of 40 CFR 60.757(b)(1) and 40 CFR 60.757(b)(2), after the installation of a collection and control system in compliance with 40 CFR 60.752(b)(2), during such time as the collection and control system is in operation and in compliance with 40 CFR 60.753 and 40 CFR 60.755.
[40 CFR 60.757(b)(3)]

- 2.23.3 Each owner or operator subject to the provisions of 40 CFR 60.752(b)(2)(i) shall submit a collection and control system design plan to DEQ within one year of the first report required under 40 CFR 60.757(b) in which the emission rate equals or exceeds 50 megagrams per year.
[40 CFR 60.757(c)]

- 2.23.4 Each owner or operator of a controlled landfill shall submit a closure report to DEQ within 30 days of waste acceptance cessation. DEQ may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to DEQ, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).
[40 CFR 60.757(d)]

- 2.23.5 Each owner or operator of a controlled landfill shall submit an equipment removal report to DEQ 30 days prior to removal or cessation of operation of the control equipment.
[40 CFR 60.757(e)]

The equipment removal report shall contain all of the following items:
[40 CFR 60.757(e)(1)]

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A copy of the closure report submitted in accordance with 40 CFR 60.757(d);

[40 CFR 60.757(e)(1)(I)]

A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and

[40 CFR 60.757(e)(1)(II)]

Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.

[40 CFR 60.757(e)(1)(III)]

DEQ may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60.752(b)(2)(v) have been met.

[40 CFR 60.757(e)(2)]

- 2.23.6 Each owner or operator of a landfill seeking to comply with 40 CFR 60.752(b)(2) using an active collection system designed in accordance with 40 CFR 60.752(b)(2)(ii) shall submit to DEQ annual reports of the recorded information in 40 CFR 60.757 (f)(1) through 40 CFR 60.757(f)(6). The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under 40 CFR 60.8. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR 60.758(c).

[40 CFR 60.757(f)]

Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a), (b), (c), and (d).

[40 CFR 60.757(f)(1)]

Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756.

[40 CFR 60.757(f)(2)]

Description and duration of all periods when the control device was not operating for a period exceeding one hour and length of time the control device was not operating.

[40 CFR 60.757(f)(3)]

All periods when the collection system was not operating in excess of five days.

[40 CFR 60.757(f)(4)]

The location of each exceedance of the 500 ppm methane concentration as provided in 40 CFR 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.

[40 CFR 60.757(f)(5)]

The date of installation and the location of each well or collection system expansion added pursuant to 40 CFR 60.755(a)(3), (b), and (c)(4).

[40 CFR 60.757(f)(6)]

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- 2.23.7 Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(iii) shall include the following information with the initial performance test report required under 40 CFR 60.8:

[40 CFR 60.757(g)]

A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;

[40 CFR 60.757(g)(1)]

The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;

[40 CFR 60.757(g)(2)]

The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;

[40 CFR 60.757(g)(3)]

The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area; and

[40 CFR 60.757(g)(4)]

The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and

[40 CFR 60.757(g)(5)]

The provisions for the control of off-site migration.

[40 CFR 60.757(g)(6)]

2.24 Recordkeeping Requirements (40 CFR 60.758)

- 2.24.1 Each owner or operator of an MSW landfill subject to the provisions of 40 CFR 60.752(b) shall keep for at least five years up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR 60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within four hours. Either paper copy or electronic formats are acceptable.

[40 CFR 60.758(a)]

- 2.24.2 Each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in 40 CFR 60.758(b)(1) through 40 CFR 60.758(b)(4) as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of five years. Records of the control device vendor specifications shall be maintained until removal.

[40 CFR 60.758(b)]

Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(ii):

[40 CFR 60.758(b)(1)]

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The maximum expected gas generation flow rate as calculated in 40 CFR 60.755(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by DEQ.

[40 CFR 60.758(b)(1)(I)]

The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR 60.759(a)(1).

[40 CFR 60.758(b)(1)(II)]

Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii) through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts:

[40 CFR 60.758(b)(2)]

The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test.

[40 CFR 60.758(b)(2)(I)]

The percent reduction of NMOC determined as specified in 40 CFR 60.752(b)(2)(iii)(B) achieved by the control device.

[40 CFR 60.758(b)(2)(II)]

Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii)(B)(1) through use of a boiler or process heater of any size: a description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing.

[40 CFR 60.758(b)(3)]

Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii)(A) through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

[40 CFR 60.758(b)(4)]

- 2.24.3 Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill subject to the provisions of this subpart shall keep for five years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

[40 CFR 60.758(c)]

The following constitute exceedances that shall be recorded and reported under 40 CFR 60.757(f):

[40 CFR 60.758(c)(1)]

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For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all three-hour periods of operation during which the average combustion temperature was more than 28°C below the average combustion temperature during the most recent performance test at which compliance with 40 CFR 60.752(b)(2)(iii) was determined.

[40 CFR 60.758(c)(1)(i)]

For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under 40 CFR 60.758 (b)(3).

[40 CFR 60.758(c)(1)(ii)]

Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756.

[40 CFR 60.758(c)(2)]

Each owner or operator subject to the provisions of this subpart who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with 40 CFR 60.752(b)(2)(iii) shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State, local, Tribal, or Federal regulatory requirements.)

[40 CFR 60.758(c)(3)]

- 2.24.4 Each owner or operator subject to the provisions of this subpart shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

[40 CFR 60.758(d)]

Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under 40 CFR 60.755(b).

[40 CFR 60.758(d)(1)]

Each owner or operator subject to the provisions of this subpart shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in 40 CFR 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR 60.759(a)(3)(ii).

[40 CFR 60.758(d)(2)]

- 2.24.5 Each owner or operator subject to the provisions of this subpart shall keep for at least five years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

[40 CFR 60.758(e)]

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- 2.24.6 Landfill owners or operators who convert design capacity from volume to mass or mass to volume to demonstrate that landfill design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, as provided in the definition of "design capacity", shall keep readily accessible, on-site records of the annual recalculation of site-specific density, design capacity, and the supporting documentation. Off-site records may be maintained if they are retrievable within four hours. Either paper copy or electronic formats are acceptable.

[40 CFR 60.758(f)]

2.25 Specifications for Active Collection Systems (40 CFR 60.759)

- 2.25.1 Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(i) shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by DEQ as provided in 40 CFR 60.752(b)(2)(i)(C) and (D):

[40 CFR 60.759(a)]

The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.

[40 CFR 60.759(a)(1)]

The sufficient density of gas collection devices determined in 40 CFR 60.759(a)(1) shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.

[40 CFR 60.759(a)(2)]

The placement of gas collection devices determined in 40 CFR 60.759 (a)(1) shall control all gas producing areas, except as provided by 40 CFR 60.759(a)(3)(i) and 40 CFR 60.759(a)(3)(ii).

[40 CFR 60.759(a)(3)]

Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under 40CFR 60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to DEQ upon request.

[40 CFR 60.759(a)(i)]

Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than one percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to DEQ upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:

[40 CFR 60.759(a)(ii)]

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$$Q_i = 2 k L_o M_i (e^{-kt} i) (C_{NMOC}) (3.6 \times 10^{-9})$$

Where,

Q_i = NMOC emission rate from the i^{th} section, megagrams per year

k = methane generation rate constant, year⁻¹

L_o = methane generation potential, cubic meters per megagram solid waste

M_i = mass of the degradable solid waste in the i^{th} section, megagram

t_i = age of the solid waste in the i^{th} section, years

C_{NMOC} = concentration of nonmethane organic compounds, parts per million by volume

3.6×10^{-9} = conversion factor

The values for k and C_{NMOC} determined in field testing shall be used if field testing has been performed in determining the NMOC emission rate or the radii of influence (this distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values for k , L_o and C_{NMOC} provided in 40 CFR 60.754(a)(1) or the alternative values from 40 CFR 60.754(a)(5) shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in 40 CFR 60.759(a)(3)(i).

[40 CFR 60.759(a)(iii)]

- 2.25.2 Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(i)(A) shall construct the gas collection devices using the following equipment or procedures:

[40 CFR 60.759(b)]

The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.

[40 CFR 60.759(b)(1)]

Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.

[40 CFR 60.759(b)(2)]

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Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.

[40 CFR 60.759(b)(3)]

- 2.25.3 Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(i)(A) shall convey the landfill gas to a control system in compliance with 40 CFR 60.752(b)(2)(iii) through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:

[40 CFR 60.759(c)]

For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in 40 CFR 60.759(c)(2) shall be used.

[40 CFR 60.759(c)(1)]

For new collection systems, the maximum flow rate shall be in accordance with 40 CFR 60.755(a)(1).

[40 CFR 60.759(c)(2)]

40 CFR 63 Subpart AAAA Requirements**2.26 General Requirement**

The permittee shall comply with 40 CFR 63, Subpart AAAA. The following permit conditions apply to ACLF based on the information in the application. Should, in the future, changes made to ACLF trigger other requirements in 40 CFR 63, Subpart AAAA, requirements in 40 CFR 63, Subpart AAAA shall govern.

2.27 When do I have to comply with this subpart? (40 CFR 63.1945)

If your landfill is an existing affected source and is an area source meeting the criteria in 40 CFR 63.1935(a)(3), you must comply with the requirements in 40 CFR 63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2), which is April 28, 2007.

[40 CFR 63.1945(f)]

2.28 When am I no longer required to comply with this subpart? (40 CFR 63.1950)

You are no longer required to comply with the requirements of this subpart when you are no longer required to apply controls as specified in 40 CFR 60.752(b)(2)(v).

2.29 What requirements must I meet? (40 CFR 63.1955)

- 2.29.1 Comply with the requirements of EPA approved and effective State plan that implements 40 CFR 60, Subpart Cc, or IDAPA 58.01.01.859.

[40 CFR 63.1955(a)(2)]

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- 2.29.2 If you are required by 40 CFR 60.752(b)(2), an EPA approved and effective State plan, to install a collection and control system, you must comply with the requirements in 40 CFR 63.1960 through 63.1985 and with the General Provisions of 40 CFR 60 specified in Table 1.

[40 CFR 63.1955(b)]

2.30 How is compliance determined? (40 CFR 63.1960)

- 2.30.1 Compliance is determined in the same way it is determined for 40 CFR 60, Subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence.
- 2.30.2 In addition, continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), and (d), are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart.
- 2.30.3 Finally, you must develop and implement a written Start up, Shut down and Malfunctions (SSM) plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write, implement, or maintain a copy of the SSM plan is a deviation from the requirements of this subpart.

2.31 What is a deviation? (40 CFR 63.1965)

A deviation is defined in 40 CFR 63.1990. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in 40 CFR 63.1965(a) through (c).

A deviation occurs when the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) are exceeded.

[40 CFR 63.1965 (a)]

A deviation occurs when one hour or more of the hours during the three-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.

[40 CFR 63.1965 (b)]

A deviation occurs when a SSM plan is not developed, implemented, or maintained on site.

[40 CFR 63.1965 (c)]

2.32 How do I calculate the three-hour block average used to demonstrate compliance? (40 CFR 63.1975)

Averages are calculated in the same way as they are calculated in 40 CFR 60, Subpart WWW, except that the data collected during the events listed in 40 CFR 63.1975(a), (b), (c), and (d) are not to be included in any average computed under this subpart:

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Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.

[40 CFR 63.1975(a)]

Startups.

[40 CFR 63.1975(b)]

Shutdowns.

[40 CFR 63.1975(c)]

Malfunctions.

[40 CFR 63.1975(d)]

2.33 What records and reports must I keep and submit? (40 CFR 63.1980)

Keep records and reports as specified in 40 CFR 60, Subpart WWW, an EPA approved State plan that implements 40 CFR 60, Subpart Cc, with one exception: You must submit a semi-annual report described in 40 CFR 60.757(f) every six months.

[40 CFR 63.1980(a)]

2.34 Who enforces this subpart? (40 CFR 63.1985)

This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or tribal agency. If the EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency as well as the U.S. EPA has the authority to implement and enforce this subpart. Contact the applicable EPA Regional Office to find out if this subpart is delegated to a State, local, or tribal agency.

[40 CFR 63.1985 (a)]

The authorities that will not be delegated to State, local, or tribal agencies are as follows. Approval of alternatives to the standards in 40 CFR 63.1955. Where these standards reference another subpart, the cited provisions will be delegated according to the delegation provisions of the referenced subpart.

[40 CFR 63.1985 (c)]

2.35 General Provisions to 40 CFR 63 Subpart AAAA (40 CFR 63 Subpart AAAA Table 1)

The permittee shall comply with the General Provisions of 40 CFR 63 included in 40 CFR 63 Subpart AAAA Table 1.

40 CFR 63 Subpart AAAA Table 1^a

Part 63 Citation	Description	Explanation
63.1(a).....	Applicability: general applicability of NESHAP in this part.	Affected sources are already subject to the provisions of paragraphs (a)(10)- (12) through the same provisions under 40 CFR, part 60 subpart A.

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- 63.1(b)..... Applicability
determination for
stationary sources.
- 63.1(e)..... Title V permitting..
- 63.2..... Definitions.....
- 63.4..... Prohibited
activities and
circumvention. Affected sources are
already subject to
the provisions of
paragraph (b)
through the same
provisions under 40
CFR, part 60
subpart A.
- 63.5(b)..... Requirements for
existing, newly
constructed, and
reconstructed
sources.
- 63.6(e)..... Operation and
maintenance
requirements,
startup, shutdown
and malfunction
plan provisions.
- 63.6(f)..... Compliance with
nonopacity emission
standards. Affected sources are
already subject to
the provisions of
paragraphs (f)(1)
and (2)(i) through
the same provisions
under 40 CFR, part
60 subpart A.
- 63.10(b)(2)(i)-(b)(2)(v).... General
recordkeeping
requirements.
- 63.10(d)(5)..... If actions taken
during a startup,
shutdown and
malfunction plan
are consistent with
the procedures in
the startup,
shutdown and
malfunction plan,
this information
shall be included
in a semi-annual
startup, shutdown
and malfunction
plan report. Any
time an action

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taken during a startup, shutdown and malfunction plan is not consistent with the startup, shutdown and malfunction plan, the source shall report actions taken within 2 working days after commencing such actions, followed by a letter 7 days after the event.

63.12(a)..... These provisions do not preclude the State from adopting and enforcing any standard, limitation, etc., requiring permits, or requiring emissions reductions in excess of those specified.

63.15..... Availability of information and confidentiality.

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3. WOOD CHIPPER, POWER SCREEN, AND TWO DIESEL ENGINE GENERATORS**3.1 Process Description**

The ACLF utilizes a wood chipper and power screen to separate processed wood debris material into various sizes. The wood chipper consists of a 12 foot diameter cone to cut and shred various wood debris materials (i.e., stumps, logs, brush, yard waste, pallets, and construction waste). The chipper is powered by a 650 horsepower diesel engine generator. Wood debris material is loaded into the 12-foot cone and processed through a drop chute onto a conveyor. The conveyor transport the wood debris material to a power screen which further separates the processed material by shaking out the wood chips and debris into various sizes. The power screen is powered by a 106 horsepower diesel engine generator.

3.2 Emissions Control Description

Particulate matter emissions from the wood chipper and from the power screen are uncontrolled. Emissions from the two diesel engine generators are uncontrolled.

Emissions Limits**3.3 Visible Emissions Limit**

The permittee shall not discharge any air pollutant into the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

Operating Requirements**3.4 Reasonable Control of Fugitive Emissions**

All reasonable precautions shall be taken to prevent particulate matter (PM) from becoming airborne in accordance with IDAPA 58.01.01.650-651. In determining what is reasonable, considerations will be given to factors such as the proximity of dust-emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of PM. Some of the reasonable precautions include, but are not limited to, the following:

- Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands.
- Application, where practical, of asphalt, water, or suitable chemicals to, or covering of, dirt roads, material stockpiles, and other surfaces which can create dust.
- Installation and use, where practical, of hoods, fans, and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.

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- Covering, where practical, of open-bodied trucks transporting materials likely to give rise to airborne dusts.
- Paving of roadways and their maintenance in a clean condition, where practical.
- Prompt removal of earth or other stored material from streets, where practical.

3.5 Fuel Oil Sulfur Content

No diesel fuel oil containing sulfur in excess of 0.5% by weight shall be burned in the diesel engine generators.

3.6 Hours of Operation

The operation of each diesel engine generator shall not exceed a maximum of 3,300 hours in any consecutive 12-month period.

Monitoring and Recordkeeping Requirements**3.7 Visible Emissions Monitoring**

The permittee shall conduct a quarterly inspection of visible emissions from each diesel engine generator stack during daylight hours and under normal operating conditions. The inspection shall consist of a see/no see evaluation of visible emissions. If any visible emissions are present from a generator stack, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in accordance with IDAPA 58.01.01.130-136. The permittee shall maintain records of the results of each visible emissions inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken. The visible emissions inspection is not required when any of the generators is not in operation. Records of this information shall be kept on site for the most recent two year period and shall be made available to DEQ representatives upon request.

3.8 Sulfur Content Monitoring

The permittee shall maintain purchase records or equivalent from the manufacturer that show the sulfur content of the fuel oil delivered to the facility. Records of this information shall be kept on site for the most recent two year period and shall be made available to DEQ representatives upon request.

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3.9 Diesel Engine Operations

The permittee shall monitor and record the date and the number of hours of operation of the diesel engine generators. Records of this information shall be kept on site for the most recent two year period and shall be made available to DEQ representatives upon request.

3.10 Reasonable Control Measures

The permittee shall conduct a monthly facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each fugitive emissions inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken. Records of this information shall be kept on site for the most recent two year period and shall be made available to DEQ representatives upon request.

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4. PERMIT TO CONSTRUCT GENERAL PROVISIONS

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the Rules for the Control of Air Pollution in Idaho. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.
2. The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.
3. The permittee shall allow the Director, and/or the authorized representative(s), upon the presentation of credentials:
 - To enter, at reasonable times, upon the premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
 - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and require stack compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the Director.
4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
5. The permittee shall furnish DEQ written notifications as follows in accordance with IDAPA 58.01.01.211.01 and 211.03:
 - A notification of the date of initiation of construction, within five working days after occurrence;
 - A notification of the date of completion/cessation of construction, within five working days after occurrence;
 - A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date;
 - A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and
 - A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date

AIR QUALITY PERMIT TO CONSTRUCT NO. P-050056

Permittee:	Ada County–Ada County Landfill	Facility ID No. 001-00195	Date Issued:	May 18, 2006
Location:	Boise, Ada County, Idaho			

6. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

7. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
8. In accordance with IDAPA 58.01.01.123, all documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.
9. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

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